

**FIG. 1**

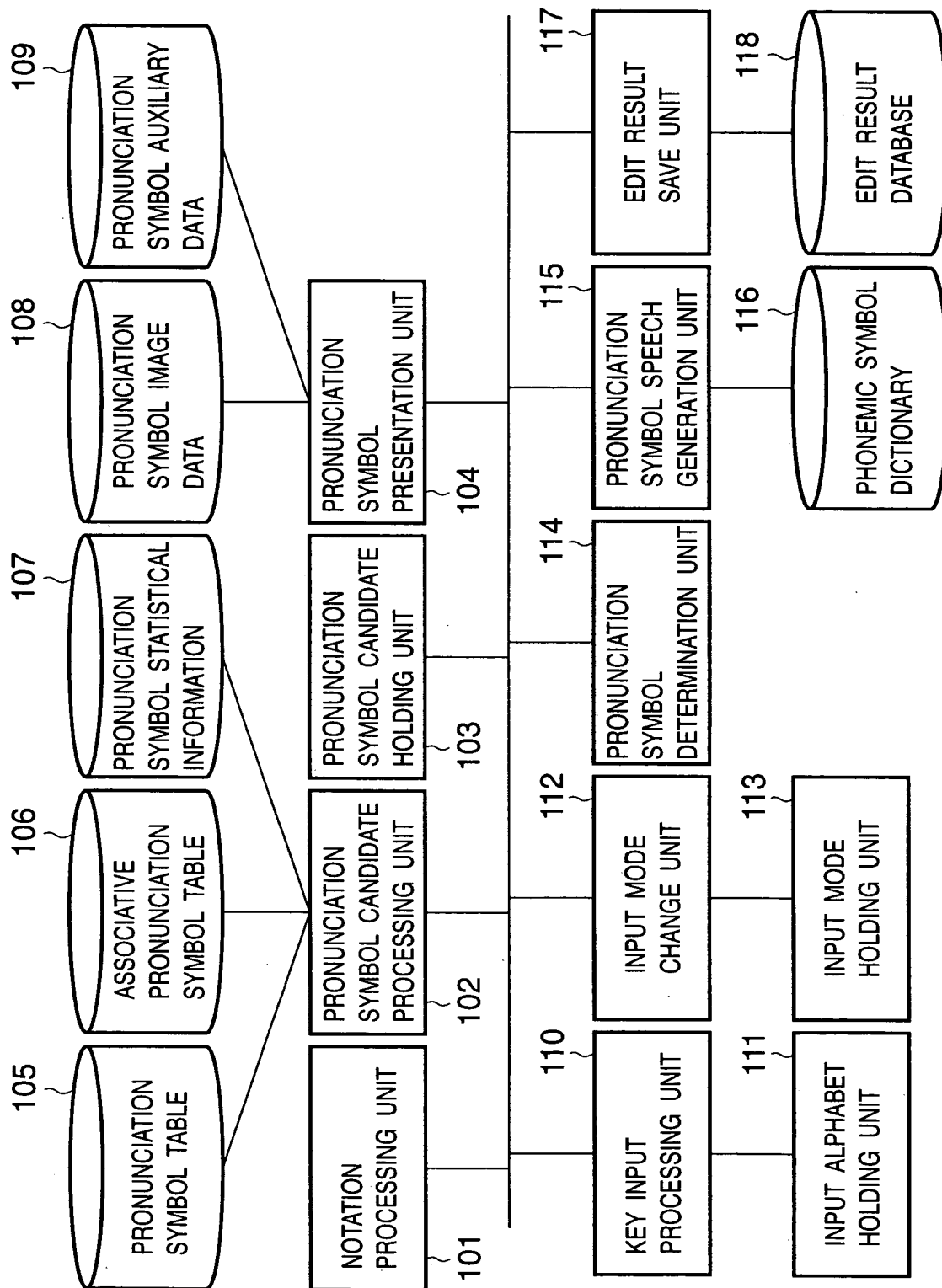
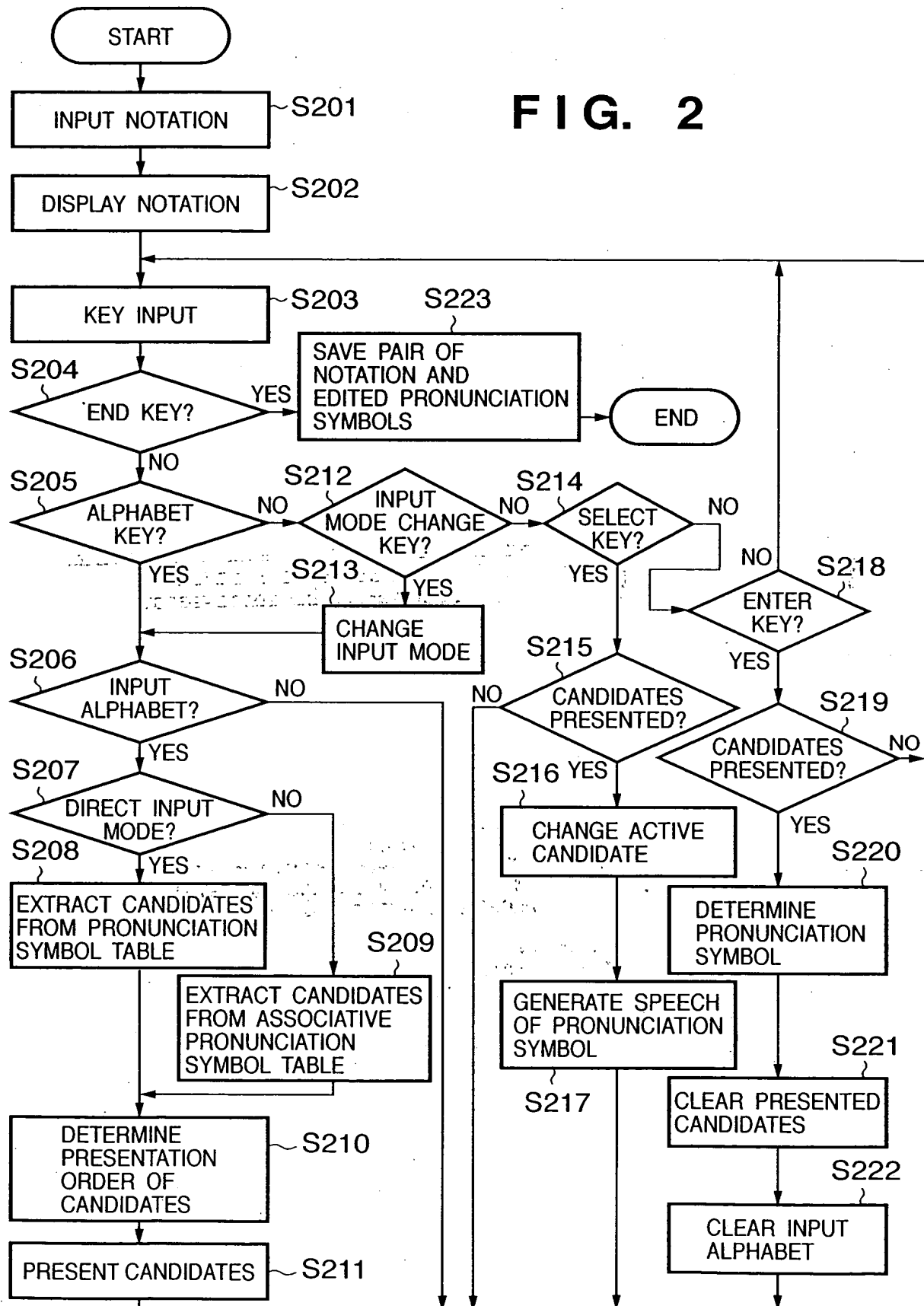


FIG. 2



**FIG. 3**

ALPHABET	PRONUNCIATION SYMBOL CANDIDATE
a	AA, AE, AH, AO, AW, AY
b	B
c	CH
d	D, DH
e	EH, ER, EY
f	F
g	G
h	HH
i	IH, IY
j	JH
k	K
l	L
m	M
n	N, NG
o	OW, OY
p	P
q	
r	R
s	S, SH
t	T, TH
u	UH, UW
v	V
w	W
x	
y	Y
z	Z, ZH

# FIG. 4

ALPHABET	PRONUNCIATION SYMBOL CANDIDATE
a	AA, AE, AH, AO, AW, AY, EH, ER, EY, IH, IY, OW
b	B
c	CH, K, S, SH
d	D, JH
e	AA, AH, AY, EH, ER, EY, IH, IY, OW
f	F
g	G, JH, ZH
h	HH
i	AH, AY, ER, IH, IY
j	HH, JH, Y, ZH
k	K
l	L
m	M
n	N, NG
o	AA, AH, AO, AW, ER, OW, OY, UW
p	F, P
q	K
r	R
s	S, SH
t	CH, DH, SH, T, TH
u	AH, AO, ER, UH, UW, Y
v	V
w	HH, W
x	K, Z
y	Y
z	Z, ZH

**FIG. 5**

FORWARD PRONUNCIATION SYMBOL	PRONUNCIATION SYMBOL OF INTEREST	STATISTICAL VALUE
Φ	AA	3
AA	AA	20
AE	AA	17
AH	AA	32
AO	AA	13
...	...	...
ZH	AA	6
Φ	AE	5
AA	AE	21
AH	AE	31
...	...	...
ZH	AE	8
...	...	...
Φ	ZH	8
AA	ZH	47
AE	ZH	43
AH	ZH	53
AO	ZH	97
...	...	...
ZH	ZH	213

# FIG. 6

ALPHABET PRONUNCIATION SYMBOL	IMAGE PRONUNCIATION SYMBOL
AA	$\alpha$
AE	Ж
AH	$\wedge$
AO	$\supset :$
AW	au
AY	ai
B	b
CH	tʃ
D	d
DH	$\delta$
EH	e
ER	ə:r
EY	ei
F	f
G	g
HH	h
IH	i
IY	i:
JH	dʒ
K	k
L	l
M	m
N	n
NG	$\eta$
OW	ou
OY	$\supset i$
P	p
R	r
S	s
SH	ʃ
T	t
TH	$\theta$
UH	u
UW	u:
V	v
W	w
Y	j
Z	z
ZH	ʒ

# FIG. 7

ALPHABET PRONUNCIATION SYMBOL	PRONUNCIATION SYMBOL AUXILIARY DATA
AA	odd : AA D
AE	at : AE T
AH	hut : HH AH T
AO	ought : AO T
AW	cow : K AW
AY	hide : HH AY D
B	be : B IY
CH	cheese : CH IY Z
D	dee : D IY
DH	thee : DH IY
EH	Ed : EH D
ER	hurt : HH ER T
EY	ate : EY T
F	fee : F IY
G	gree : G R IY N
HH	he : HH IY
IH	it : IH T
IY	eat : IY T
JH	gee : JH IY
K	key : K IY
L	lee : L IY
M	me : M IY
N	knee : N IY
NG	ping : P IH NG
OW	oat : OW T
OY	toy : T OY
P	pee : P IY
R	read : R IY D
S	sea : S IY
SH	she : SH IY
T	tea : T IY
TH	theta : TH EY T AH
UH	hood : HH UH D
UW	two : T UW
V	vee : V IY
W	we : W IY
Y	yield : Y IY L D
Z	zee : Z IY
ZH	seizure : S IY ZH ER

**FIG. 8**

NOTATION	PRONUNCIATION SYMBOL
this	DH IH S
is	IH Z
a	AH
pen	P EH N
that	DH AE T



# FIG. 9

